

RECEIVED

5-5-05 30

2622

MAY 10 2005

PTO/SB/21 (04-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Technology Center 2600
TRANSMITTAL
FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission	Application Number	10/084,123
	Filing Date	February 27, 2002
	First Named Inventor	Hiro Yoshi Komobuchi et al.
	Art Unit	2622
	Examiner Name	
Attorney Docket Number		5077-000088

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Supplemental Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): return postcard; IDS Form 1449; 2 cited references; and copy of Notice of Reasons of Rejection for JP 2002-045583;
---	--	--

Remarks

The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name	Jennifer S. Brooks	Reg. No.	51,501
Signature					
Date	May 4, 2005				

CERTIFICATE OF TRANSMISSION/MAILING

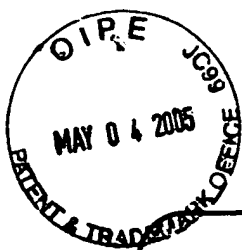
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Jennifer S. Brooks	Express Mail Label No.	EV 406 075 983 US (5/4/2005)
Signature		Date	May 4, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

EV 406 075 983 US

**RECEIVED**

MAY 10 2005

Technology Center 2600

PTO/SB/21 (04-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, this form and its instructions correspond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/084,123
	Filing Date	February 27, 2002
	First Named Inventor	Hiroyoshi Komobuchi et al.
	Art Unit	2622
	Examiner Name	
Total Number of Pages in This Submission	Attorney Docket Number	5077-000088

ENCLOSURES (check all that apply)				
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Supplemental Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) <i>(please identify below)</i> return postcard; IDS Form 1449; 2 cited references; and copy of Notice of Reasons of Rejection for JP 2002-045583;		
<table border="1"><tr><td>Remarks</td><td>The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.</td></tr></table>			Remarks	The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.
Remarks	The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.			

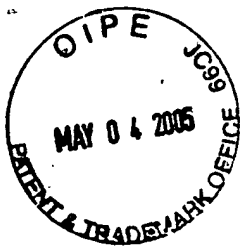
RECEIVED
MAY 10 2005
Technology Center 2600

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name Jennifer S. Brooks	Reg. No. 51,501
Signature			
Date	May 4, 2005		

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Jennifer S. Brooks	Express Mail Label No.	EV 406 075 983 US (5/4/2005)
Signature		Date	May 4, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/084,123
Filing Date: February 27, 2002
Applicant: Hiroyoshi Komobuchi et al.
Group Art Unit: 2622
Examiner: Not yet assigned
Title: Solid-state Image Pickup Apparatus and Method for Driving the Same
Attorney Docket: 5077-000088

RECEIVED

MAY 10 2005

Technology Center 2600

Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. **LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION**

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. **COPIES**

A. ☒ Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

B. ☐ Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

U.S. Filing Date

C. ☐ This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).)

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

A. ☐ Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).

B. ☒ A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):

1. ☒ See the attached foreign patent office communication from a counterpart foreign application:

Notice of Reasons of Rejection for JP 2002-045583 mailed 3/29/05.

2. ☒ English translations are provided:
Abstracts.

3. ☐ Other:

C. ☐ The following additional information is provided for the Examiner's consideration.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A. ☐ The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does (do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.

Filing Date

Art Unit

V. THIS IDS IS BEING FILED UNDER

A. ☒ **37 C.F.R. § 1.97(b):** (check only one box)

1. ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.
2. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.
3. ☒ before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
4. ☐ before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

B. ☐ **37 C.F.R. § 1.97(c):** (check only one box)

before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

1. ☐ No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
2. ☐ See the certification below. No fee is required.

C. ☐ 37 C.F.R. § 1.97(d):

after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1. ☐ See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)

The undersigned hereby certifies that:

A. ☒ each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or

B. ☐ no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C. ☐ some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

VII. STATEMENT UNDER 37 C.F.R. 1.704(d)

The undersigned hereby states that:

☐ each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

A. ☐ A check in the amount of \$180.00 is enclosed for the above identified fee.

B. ☐ Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.


The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

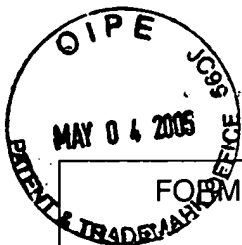
Respectfully submitted,

Dated: May 4, 2005

By: 
Jennifer S. Brooks
Reg. No. 51,501

Harness, Dickey & Pierce, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

GAS/kk



FORM HDP-1449 (Based on Form PTO-1449)

**PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION**
(Use several sheets if necessary)

Sheet 1 of 1

ATTORNEY DOCKET NO.

5077-000088

SERIAL NO.

10/084,123

APPLICANT

Hiroyoshi Komobuchi et al.

FILING DATE

February 27, 2002

GROUP

2622

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.						

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.		2000-299818	10/24/2000	Japan		Abstract	
2.		02-078382	03/19/1990	Japan		Abstract	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.		

RECEIVED

MAY 10 2005

Technology Center 2600

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(TRANSLATION)

Docket No. 2033840005

Mailing No. 113978

Mailing Date: March 29, 2005

NOTICE OF REASONS OF REJECTION

Patent Application Number:	2002-045583 for patent
Drafted Date:	March 25, 2005
Examiner:	Kenji TOKUDA 3137 5P00
Agent:	Hiroshi MAEDA (and other 7 persons)
Applied Law:	Section 29(2)

This application is deemed to be rejected for the following reasons. If there is any opinion thereagainst, an Argument should be filed within 60 days from the mailing date of this Notice of Reasons of Rejection.

REASON

The inventions according to the below-mentioned claims of the present application are such as could readily be inferred, on the basis of the inventions disclosed in the publications listed below distributed prior to the filing date of the present application in Japan and/or foreign countries and/or inventions available to public via electric communication lines, by those who

have common knowledge in the technical field to which the inventions belong. Hence, under the provision of Patent Law Section 29(2), a patent shall not be granted.

REMARKS (See the following citation list about cited references.)

Claim(s): 1 to 5, 7, 8, and 12

Cited Reference(s): 1 and 2

Comment:

[Regarding Claims 1, 4, and 12]

Cited Reference discloses a CCD-type solid-state image pickup apparatus including a horizontal charge transfer CCD in each region, in which a variation in respective output signals from the horizontal charge transfer CCDs is corrected according to a reference signal.

Further, Cited Reference 2 discloses a CCD-type solid state image pickup apparatus having a plurality of horizontal charge transfer CCDs, which includes a reference signal generating circuit for generating a reference signal charge and a CCD for an distributing circuit in order to correct a variation among respective output signals from horizontal charge transfer CCDs. It is deemed as a matter that a person skilled in the art can readily conceive to employ the structure of the invention disclosed in Cited Reference 2 instead of the structure for generating a reference signal in the

invention disclosed in Cited Reference 1.

[Regarding Claim 2]

The CCD for an distributing circuit in Cited Reference 2 is naturally considered to have a charge storage part. Further, since a reference signal is transferred from the CCD for an distributing circuit to a vertical charge transfer CCD in the invention disclosed in Cited Reference 2, it is obvious for a person skilled in the art that the CCD for an distributing circuit transfers a reference signal to each of two adjacent regions when the structure of the invention disclosed in Cited Reference 2 is employed instead of the structure for generating a reference signal in the invention disclosed in Cited Reference 1.

[Regarding Claim 3]

Since the CCD for an assignment circuit in Cited Reference 2 transfers a reference signal charge supplied from the reference signal generating circuit, the CCD is considered to correspond to the "marker signal transfer portion" in Claim 3 of the present application.

[Regarding Claim 5]

To set portions other than a photo acceptance part to be shaded from light is deemed as a matter that a person skilled in the art can adequately achieve according to needs.

[Regarding Claims 7 and 8]

Cited Reference 2 discloses, at lines 15 to 20 of the upper left column on

page 5, that the level of a reference signal is to be appropriately set, and hence, it is deemed as a matter that a person skilled in the art can readily achieve to enable to set the level of a reference signal based on the above descriptions.

CITATION LIST

1. JP 2000-299818A
2. JP 02-078382A

At present, no reason of rejection is found for the inventions drawn to Claims other than the above Claims indicated in the present Notice of Reasons of Rejection. If any reason of rejection is newly found, it will be notified.

Record of Result of Search for Prior Art References

Searched Field	IPC 7 th Edition	H04N 5/30-5/335
		H01L 27/14-27/148

This Record of Result of Search for Prior Art References does not constitute the reasons of rejection.

If there is any question relating to the contents of this Notice of Reasons of Rejection, or an interview is desired, please contact to the following.

Fourth Examination Division: Image Apparatus, Takeshi MATSUDA

TEL. No. 03-3581-1101 (extension code No. 3502)

FAX No. 03-3501-0699

拒絶理由通知書



特許出願の番号 特願2002-045583
起案日 平成17年 3月25日
特許庁審査官 ▲徳▼田 賢二 3137 5P00
特許出願人代理人 前田 弘(外 7名) 様
適用条文 第29条第2項

この出願は、次の理由によって拒絶をすべきものである。これについて意見があれば、この通知書の発送の日から60日以内に意見書を提出して下さい。

理 由

この出願の下記の請求項に係る発明は、その出願前日本国内又は外国において頒布された下記の刊行物に記載された発明又は電気通信回線を通じて公衆に利用可能となった発明に基いて、その出願前にその発明の属する技術の分野における通常の知識を有する者が容易に発明をすることができたものであるから、特許法第29条第2項の規定により特許を受けることができない。

記 (引用文献等については引用文献等一覧参照)

請求項：1-5、7、8、12

引用文献：1、2

備考：

[請求項1、4、12について]

引用文献1には、領域毎に水平電荷転送CCDを備えたCCD型固体撮像素子において、基準信号に基づいて各水平電荷転送CCDからの出力信号のばらつきを補正するものが記載されている。

また、引用文献2には、複数の水平電荷転送CCDを有するCCD型固体撮像素子において、各水平電荷転送CCDからの出力信号のばらつきを補正するために、基準信号電荷を発生させる基準信号発生回路と、振り分け回路用CCDとを備えたものが記載されており、引用文献1に記載されている発明における基準信号を発生させるための構成に代えて、引用文献2に記載されている発明の構成を採用することは、当業者が容易に想到し得たことと認める。

[請求項2について]

引用文献2の振り分け回路用CCDは、CCDであるから当然に電荷蓄積部を有するものと認める。また、引用文献2に記載されている発明において、基準信

「請求項3について」

〔請求項 5 について〕

「請求項 7、8 について」

引用文獻等一覽

- この拒絶理由通知書中で指摘した請求項以外の請求項に係る発明については、現時点では、拒絶の理由を発見しない。拒絶の理由が新たに発見された場合には拒絶の理由が通知される。

この拒絶理由通知の内容に関するお問い合わせ、または面接のご希望がございましたら下記までご連絡下さい。

整理番号:2033840005 発送番号:113978 発送日:平成17年 3月29日 3/E

特許審査第四部映像機器 松田 岳士

TEL. 03 (3581) 1101 内線3502

FAX. 03 (3501) 0699